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ABSTRACT

This article defines a performance objective as an answer to the questions of who does what, how well, and under what conditions. Three components usually considered mandatory for a performance objective are the action or behavior in which the person engages to demonstrate that he has learned what he was expected to learn, the condition under which he is to carry out the action, and the minimum standard or criteria which he is expected to meet to prove that he really did learn at an acceptable level. After defining and giving examples of performance objectives, the publication discusses the method of writing a performance objective, producing usable objectives to guide learning, student validation of objectives, domains of learning, and objectives for personnel evaluation. (Author/DN)

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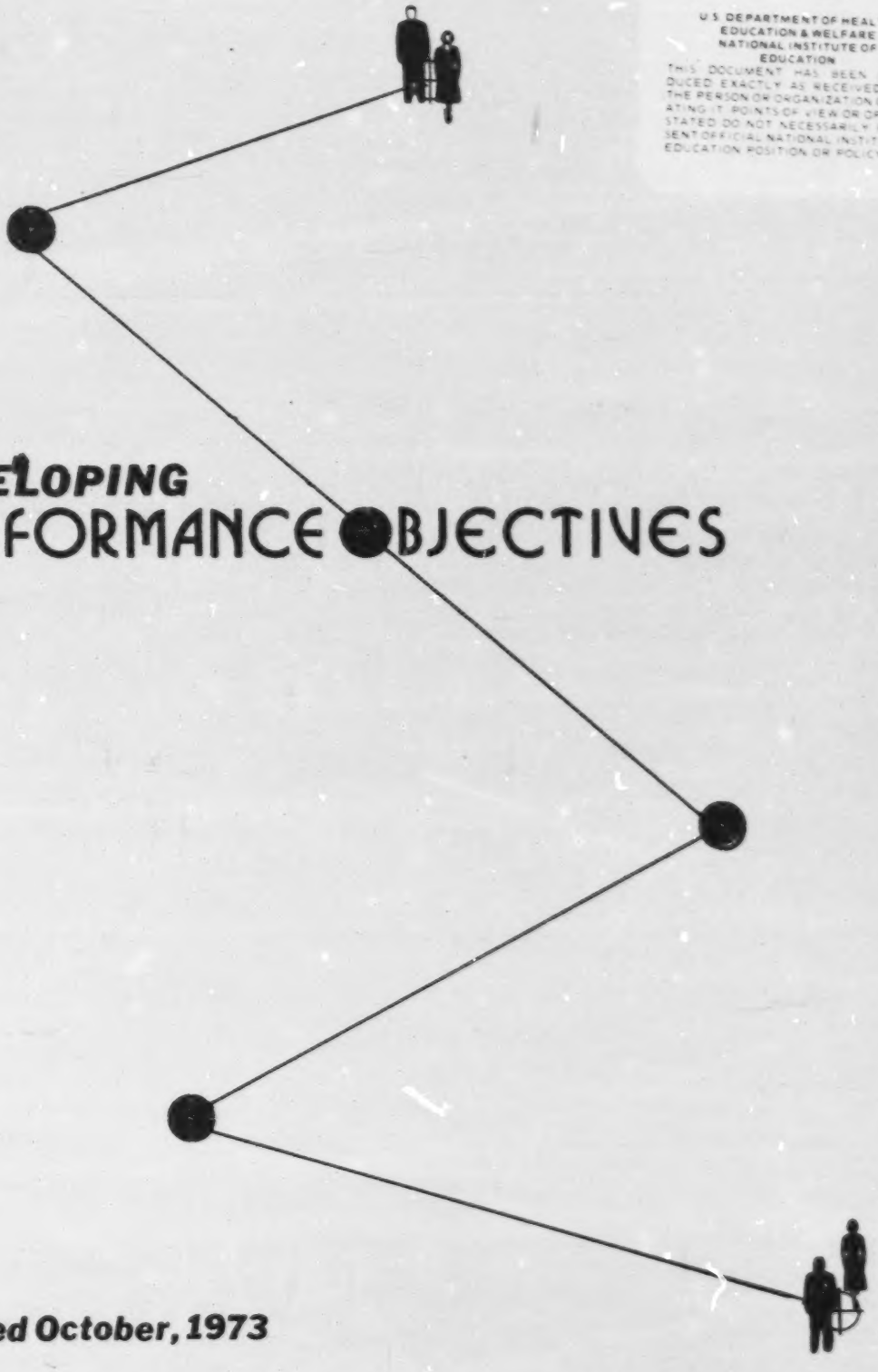

DEVELOPING PERFORMANCE OBJECTIVES

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DEVELOPING PERFORMANCE OBJECTIVES

by

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DEVELOPING PERFORMANCE OBJECTIVES

This article is about performance objectives. It deals specifically with the following topics:

A. What Is a Performance Objective? (page 2)

B. Definitions, Examples, and Sources (page 7)

C. Learning to Write a Performance Objective (page 10)

D. Producing Usable Objectives to Guide Learning (page 17)

E. Student Validation of Objectives (page 23)

F. Domains of Learning (page 25)

G. Objectives for Personnel Evaluation--In Perspective (page 27)

H. Conclusion (page 32)

In exploring this material the reader should keep in mind two significant concepts:

1. Performance objectives are tools. As tools they can be used to promote pupil learning--or can be misused to retard it.
2. Objectives should be servants of teachers and students--not masters of the learning process.

A. WHAT IS A PERFORMANCE OBJECTIVE?

In its simplest form a performance (or behavioral) objective answers the question:

WHO DOES WHAT, HOW WELL, UNDER WHAT CONDITIONS?

. . . an example in reading might state:

> "Each student during the first semester will read at least four novels from an approved list and will report, either orally to the class or in writing, a description of three primary personal characteristics of the main character in each novel. Accuracy of the descriptions will be rated by the teacher."

Now let's analyze this objective:

The different parts of an objective are called "components". The order in which they are stated in the objective is immaterial.

WHO? --------	"Each student . . ."
DOES WHAT? --	". . . will read at least four novels and will report . . ."
HOW WELL? ---	well enough to describe ". . . three primary personal characteristics of the main character in each novel. Accuracy of the descriptions will be rated by the teacher."
UNDER WHAT CONDITIONS? -	". . . during the first semester . . .", "either orally to the class or in writing."

How does this objective compare with the way it might have been stated in previous years. A decade ago the objective would probably have read:

> "An objective for the first semester of this course is for each member of the class to read at least four novels."

Get the idea? There is an obvious difference in these two objectives. In the former it is clear to both the teacher and to the student what he is expected to do, how well he is to do it, and under what conditions. The latter so called objective simply lists an activity. Those who in the past have experienced objectives such as this one, recall the struggle which the teacher inevitably had to determine if the student actually read the book.

Practice helps us put into words our changed attitudes about responsibility for pupil learning. These changes can perhaps best be illustrated by asking the question, "If it's worth taking the time to teach, isn't it also worth finding out whether or not the pupil learned?" Utilizing performance objectives as a tool helps the teacher answer this question.

When one starts to work on today's objectives he is immediately faced with the problem of terminology. Are we talking about "performance", or "behavioral" objectives, or just plain objectives? How many "components" are necessary for a complete objective? What terms are used to describe each component? (See page 4.)

Don't get bogged down in terminology. The following are for the most part acceptable:

1. "Performance" and "behavior" are usually used interchangeably (except with EPIC). Either is acceptable. When just the word "objective" is used in today's context it usually means a "performance" type objective. In this paper the term "performance" is used since behavior is frequently confused with "behaviorism", or "behavioristic", or even the old fashioned "deportment".
2. No matter what terms are used there are three components which are usually considered mandatory to a performance objective.

COMPONENTS OF PERFORMANCE OBJECTIVES:

A SYNTHESIS OF TERMINOLOGY

AUTHOR	OPERATION PEP	INSGROUP	EPIC (Process Objective)	EPIC (Behavioral Objective)	EPIC (Performance Objective)	ROBERT MAGER	GENERAL PROGRAMMED TEACHING	NELSON PRICE
Terminology used by various authors to identify components of an objective.			WHO	WHO (Institutional Variable)	WHO (Institutional Variable)			WHO
	OUTCOME	OUTCOME	ACTION	DESIRED BEHAVIOR (Behavioral Variable)	DESIRED BEHAVIOR (Behavioral Variable)	TERMINAL BEHAVIOR		ACTION[1/] or BEHAVIOR
	CONDITIONS	CONDITIONS of EVALUATION		CIRCUMSTANCES (Instructional Variable)	CIRCUMSTANCES (Instructional Variable)	CONDITIONS	CONDITIONS	CONDITIONS[1/] OF EVALUATION
			TIME		TIME or PREREQUISITE			TIME
	CRITERIA	LEVEL OF ACHIEVEMENT	TANGIBLE OUTCOME	MEASUREMENT	EXPECTED PROFICIENCY	CRITERIA of ACCEPTABLE PERFORMANCE	STANDARD	CRITERIA[1/]
	RATIONALE							RATIONALE
	MODIFIERS							NARRATIVE
				METHOD OF MEASUREMENT	METHOD OF MEASUREMENT			

1/ Considered mandatory by most authorities.

These are:

a. The action or behavior in which the person engages to demonstrate that he has learned what he was expected to learn.

b. The conditions (of evaluation) under which he is to carry out the action (or be tested).

c. The minimum standard or criteria which he is expected to meet to prove that he really did learn at an acceptable level.

SUMMARY

The student demonstrates that he has learned by:[1/]

(ACTION)

- Recalling facts
- Solving problems
- Repeating definitions
- Analyzing ideas
- Identifying things or places
- Completing projects

He also may demonstrate competence by:

- Taking a written test
- Giving an oral explanation
- Role palying
- Exhibiting behavior of a certain kind
- Making something

etc.

Description of conditions under which the student demonstrates, or the "givens," include time limitations, equipment, location, etc. They might be stated as:

(CONDITIONS OF EVALUATION)

- Given a test of ten questions ...
- Prior to the end of the semester ...
- Either at home or in class ...
- Using any of the materials in class ...
- In ten minutes ...

etc.

Examples of criteria or ways of judging pupil success might include:

(CRITERIA)

- According to a set criterion
- To the satisfaction of the learner's peer group
- To the satisfaction of the teacher
- With 90% accuracy
- A certain score as measured by a standardized test
- To the satisfaction of the learner himself
- With not more than 2 errors

etc.

1/ Adapted from Performance Objectives and the Sequential Learning Path, Northern California Program Development Center, Chico State College, Chico, CA 95926, 1971, page 14ff.

The other so called components are supplementary or supportive of these three, but most "authorities" don't consider them mandatory. The next three pages deal with definitions, examples, and sources of more information on objectives.

B. DEFINITIONS, EXAMPLES, AND SOURCES

Objectives set forth the performance specifications and "testing" situations to indicate progress toward achieving the goals.

DEFINITION	EXAMPLES	SOURCES OF MORE INFORMATION, EXAMPLES, AND PROCEDURES
An objective is a desired accomplishment which can be measured within a given time frame and under specific conditions. The attainment of the objective advances the system toward a corresponding goal. Or ... a devised accomplishment that can be verified within a given time and under specifiable conditions ... EC 7563	"To demonstrate growth in vocabulary each child will list correctly five synonyms, five antonyms, and five homonyms in a 30-minute test done in class. Papers will be graded by the teacher. The exercise will be repeated by each student until he successfully completes it." (Objectives for Catholic schools)	WHERE TO FIND HELP IN LEARNING HOW TO WRITE OBJECTIVES: Responsibility Centers, Goals and Objectives, Folsom-Cordova Unified School District, 1091 Coloma Street, Folsom, CA 95630 A Manager's Guide to Objectives, Operation PEP, 1969, San Mateo County Schools, 333 Main Street, Redwood City, CA 94063 Performance Objectives and the Sequential Learning Path, Program Development Center of No. Calif., Chico State College, Chico, CA 95926 Performance and Process Objectives, and Developing and Writing Behavioral Objectives, Educational Innovators Press, Box 13052, Tucson, AZ 95711 (EPIC) Objectives for Instructional Programs, 1970, INSGROUP, 5855 Naples Plaza, Suite 204, Long Beach, CA 90803 (films and tapes) Designing Effective Instruction, (Units 1-5), General Programmed Teaching, P. O. Box 402, Palo Alto, CA 94302 (films and tapes) Writing Performance Objectives, Orange Unified School District, 370 N. Glassell St., Orange, CA 92666 Plus numerous publications by such authors as Robert Mager, James Popham, and Eva Baker
COMMENT		
In other words, an objective answers the questions: "Who does what, how well, under what conditions?" When one talks about "measuring" student achievement, the term should be broadly interpreted. In a performance objective student achievement can be measured or observed or it may be quantified.	"75% of the pupils will give evidence of their knowledge of elementary facts of the solar system by answering correctly twelve out of fifteen multiple choice questions in a teacher made test." "Upon completion of the unit on the post Civil War period, each pupil will explain the increased industrialization of this country by describing either in writing or orally to the class the significance of three inventions. Oral presentations will be judged on a check list by three members of the class, written presentations will be evaluated by the teacher." (Objectives for Catholic schools)	

Performance vs. Process Objectives

DEFINITION	EXAMPLES	SOURCES OF MORE INFORMATION, EXAMPLES, AND PROCEDURES
First: There are basically only two <u>kinds</u> of objectives-- PROCESS and PERFORMANCE Process objectives are usually organizational objectives. Performance objectives may refer to the organization, to an instructional program, to a staff member, or to the pupil (learner). Many objectives written in the past were "process" objectives. Process objectives do have a place in planning. They are easy to write. However, in today's context most objectives related to <u>pupil</u> learning are performance or behavioral objectives.	<u>Process Objective</u> "The school will provide an efficient and economical procedure for ordering, receiving, distributing, utilizing and being held accountable for the use of educational supplies." (Fountain Valley School District) <u>Performance Objective</u> By the end of the year each pupil in the first grade will state orally his father's, or head of household's occupation when asked by the teacher.	Both the Norwalk-La Mirada Unified School District, 12820 Pioneer Blvd., Norwalk, CA 90650, and the Fountain Valley School District, 1 Lighthouse Lane, Fountain Valley, CA 92708, have done excellent jobs of developing <u>process</u>, as well as its <u>performance</u> objectives. Each of the PPBS pilot districts in California did extensive work in developing performance objectives. These have now been joined by many other districts which have developed sequences of objectives as a regular part of their programs of curriculum development. In some cases this work was accelerated by implementation of Stull Act procedures.
	Levels of Objectives	Sources of Information On Levels of Objectives
NEXT: OBJECTIVES CAN BE CLASSIFIED BY <u>LEVEL</u>. Most people working in this field recognize several levels: policy objectives, program objectives, curricular objectives, and instructional objectives--some add learner or pupil objectives, or task level objectives. But: <u>All</u> of the objectives are performance objectives. <u>All</u> are educational objectives. They vary in degree of specificity. Policy objectives are broad and are usually developed at district level.	These essential educational outcomes are to be achieved by each individual enrolled in the schools of this district under conditions that are prevalent. This policy will be implemented through use of internally consistent program, curricular and instructional objectives, and corresponding plans and operational activities that are designed to facilitate goal attainment. (Numerous criteria are listed, one of which is: can the individual student attack new problems by demonstrating a logical approach to problem solving? (Operation PEP)	<u>A Manager's Guide to Objectives</u>, Operation PEP, 1969, San Mateo County Schools, 333 Main Street, Redwood City, CA 94063 <u>Objectives for Instructional Programs</u>, 1970, INSGROUP, 5855 Naples Plaza, Suite 204, Long Beach, CA 90803 (films and tapes) <u>Performance Objectives and the Sequential Learning Path</u>, Program Development Center of No. Calif., Chico State College, Chico, CA 95926

DEFINITION	EXAMPLES	SOURCES OF MORE INFORMATION, EXAMPLES, AND PROCEDURES
Program objectives are those which in PPBS relate to a "program." Similar levels of objectives may be used for secondary school departments, or elementary school subject areas. This objective is also a terminal performance objective (TPO) because it refers to the end of a major segment of the pupil's learning experiences.	Upon completion of the 8th grade at Valley View Elementary School, at least 90% of the students will be reading on or above a grade equivalent score of 8.0, as measured by the California Test of Basic Skills, Form Q, Level 3 (Program Development Center).	Names and address of selected school districts having extensive experiences with performance type objectives[1]: Berkeley Unified School District 1414 Walnut St., Berkeley CA 94709 Calexico Unified School District P. O. Box 792, Calexico, CA 92231 El Monte Union High School Dist., 3537 Eastmont Ave., El Monte, CA 91731 Fallbrook Union High Sch. Dist., P. O. Box 368, Fallbrook, CA 92028 Folsom-Cordova Unified Sch. Dist., 1091 Coloma St., Folsom, CA 95630 Fountain Valley School Dist., 1 Lighthouse Ln., Fountain Valley, CA 92708 Hillsborough City School Dist., 300 El Cerrito Ave., Hillsborough, CA 94010 Pacific Grove Unified Sch. Dist., P. O. Box 448, Pacific Grove, CA 93950 Richmond Unified Sch. District, 1108 Bissell Ave., Richmond, CA 94802 San Diego City Unified Sch. Dist., 4100 Normal St., San Diego, CA 92103 San Mateo Union High Sch. Dist., 650 N. Delaware St., San Mateo, CA 94401 Saugus Union School District, 26590 N. Bouquet Canyon Rd., Saugus, CA 91350 Stockton City Unified School Dist., 701 N. Madison St., Stockton, CA 95202 Torrance Unified Sch. Dist., 2335 Plaza del Amo, Torrance, CA 90509
Instructional objectives usually refer to a specific subject and grade. It is difficult to distinguish between "curricular" and "instructional" objectives, so we will just call them instructional--remember, they are still all "performance" and all are "educational" objectives.	(Physical Education) The learner will perform on physical fitness performance tests following the State Manual and district regulations and showing 5% improvement over his previous year's record in three out of five tests. (Program Development Center of Northern California)	
Task level objectives are those used by teachers and students in actual classroom instruction. They are usually found in brief units of instruction or daily lesson plans. To put this another way: Policy objectives relate to the work of the whole organization; program objectives to a major cluster of activities, instructional objectives to a single activity within the cluster, and task objectives to the various task need to carry out the single activity.	(Reading) Given a list of character traits each pupil will circle those traits which characterize the main character of the story. He will justify his choices either orally to the class or in writing to the teacher. Success will be judged by the quality of logic used in his choices. Communication Skills English Composition Adverbs	

1/ Program budgets of these districts, including objectives, are available at the ERC, San Mateo County Schools Office, 333 Main Street, Redwood City, CA 94063.

C. LEARNING TO WRITE A PERFORMANCE OBJECTIVE

For the moment skip the consideration of different types, classifications, or hierarchies of objectives. We will consider that topic in more depth later. Let's look at another example of a performance objective. But first, let's set the stage by relating the objective to a pupil learning goal.

> The Jefferson Union High School District has a published statement of District goals: One is: "Job entry skills: (The student) should acquire the skill necessary for entry-level employment in at least one occupational area."

One of the business teachers has written the following objective for the course "Introduction to Business." This is one objective designed to help reach the above goal. At the left the various components are indicated.

COMPONENT	ACTUAL OBJECTIVE
Condition (Givens)	Given a list of the principal forms of business organization,
Condition (Givens)	and a list of characteristics describing one or more of these forms,
Action (Who and What)	the student will identify those characteristics which describe each form of business organization
Condition (Time)	in 20 minutes of class time,
Criteria (Standard)	with at least 90% accuracy.
Narrative (Explanation)	If the student should fail to accomplish this objective, he will be given remedial instruction, and will repeat the exercise until he is successful.

NOTE: This is one of the optional components mentioned on p. 4.

Every objective should relate to a goal. For objectives to be developed in context the goal must first be stated. Notice that the objective on the previous page related to the goal of developing "job entry skills."

> A goal is a universal, continuing purpose that provides a sense of broad direction. It does not have a time constraint. It is general to a wide area of endeavor and the individuals or groups operating within that area. A goal is suggestive of a range or set of corresponding objectives.

> EXAMPLE: A mastery of the basic skills of communication.

Write below the goal, or one of the goals, of your program, or operation.

_____

_____

_____

Next write an objective relating to <u>this</u> goal using the form on the next page. Note that there is a space for "rationale." While this is not an essential component it is important at this stage to be absolutely clear <u>why</u> the student must achieve the objective. The rationale tells why or to what learning area it relates. The rationale often starts out like this: "In order to demonstrate competence in punctuation, the student will . . . ." The chart on page 4 will help relate this optional component to the others.

> A word about forms on which to write: Some people detest them, some like one, some another. The form on the next page has proven useful and practical--but if you prefer, use blank paper.

Now write!

FORM A

PERFORMANCE OBJECTIVES

RATIONALE	ACTION	CRITERION	CONDITION OF EVALUATION
EXAMPLE: To demonstrate competence in reading as it relates to reading speed,	the student will read 4,000 words,	at an average speed of 400 words per minute,	in a standard classroom testing situation using a book of the student's choice from a recommended list.
1)			
2)			
3)			

NOTE: For learning purposes it often helps to write the various components in the "boxes" provided. In actually producing objectives you may prefer to change there order or even mix the various components.

You have now written an objective. Ask the following questions, about what you wrote. Remember that the order in which the various components appear in the objective is unimportant.

1. Is it clear why the student should learn what you want him to learn--or the subject, or the skill area?
2. Have you stated what the learner is to do to demonstrate that he learned?
3. Have you adequately described the conditions under which the student is to demonstrate his competence?
4. Are the expected standards of proficiency clearly stated?

Robert Mager's book, Preparing Instructional Objectives, written in 1962, was a pioneering effort in this field. Today many of the objectives which were written even 3-4 years ago are considered "trival," or "insignificant," and many are. Following Mager's admonition in writing objectives we were at one time afraid of words like "understand," "appreciate," etc.--and particularly of writing objectives dealing with emotions and feelings (the affective domain). Today we have learned to identify either measures or indicators of pupil success in many of these areas. Because of their critical value to the overall development of the pupil, most educators stress these types of learnings and do their best to include in the objectives measures or indicators of the degrees of success.

On the next three pages are other forms for writing objectives. If you like them, use them. If not, go back and write another objective using the form on the preceding page--or a blank piece of paper.

FORM B

PRACTICE FORM FOR CONSTRUCTING A PERFORMANCE OBJECTIVE

(Fill in the blanks)

Rationale	In order to demonstrate _____
	_____
Who	each _____
Action	will _____.
When	The action will be performed _____
Where	_____
With What, etc.	_____.
Criteria or Standard	An acceptable level of performance will be _____
	_____
	_____.

NOTE:	EXAMPLE
This wording is not required, but the various components must be included.	In order to demonstrate mastery of skill in addition each student in the 8th grade will solve 30 addition problems, 10 each of simple addition, fractions, and decimals. The action will be performed in class without time limit on a teacher made test. An acceptable level of performance will be achieved when the student correctly solves eight problems out of each group of ten.

FORM C -- INSTRUCTIONAL OBJECTIVE WRITING FORM

(STUDENT LEARNING OBJECTIVE)

Grade or Level _____

ITEMS TO BE LEARNED	ACTION	CONDITIONS AND/OR TESTING INSTRUMENTS	CRITERIA OF SUCCESS	COMMENT OR EXPLANATION
The student will demonstrate . . .	. . . by _____		The student will be successful if . . .	
The student will demonstrate . . .	. . . by _____		The student will be successful if . . .	
The student will demonstrate . . .	. . . by _____		The student will be successful if . . .	
The student will demonstrate . . .	. . . by _____		The student will be successful if . . .	

SAMPLE

FORM D -- INSTRUCTIONAL OBJECTIVE WRITING FORM

(STUDENT LEARNING OBJECTIVE)

Grade or Level Primary

ITEMS TO BE LEARNED	ACTION	CONDITIONS AND/OR TESTING INSTRUMENTS	CRITERIA OF SUCCESS	COMMENT OR EXPLANATION
The student will demonstrate . . . ability to add	. . . by Completing ten two digit addition problems	on a teacher made test.	The student will be successful if . . . all but one are correct.	
The student will demonstrate . . . Knowledge of numeration	. . . by Counting to 25	orally to the teacher or in writing when asked.	The student will be successful if . . . he counts without error.	The student will repeat the exercise weekly until successful.
The student will demonstrate . . . awareness of his name	. . . by giving his first and last name	orally or in writing when asked by the teacher.	The student will be successful if . . . he gives his name correctly 5 consecutive times at various time intervals.	The student will not be marked down on his spelling or penmanship
The student will demonstrate . . . interest in reading	. . . by going to the reading Center	voluntarily during "free" class time with several choices.	The student will be successful if . . . he goes to the reading center at least once per month.	Emphasis will be on the teacher creating interest and curiosity in each student.

D. PRODUCING USABLE OBJECTIVES TO GUIDE LEARNING

Once the technique of writing objectives is learned the production process can begin. As you start to write keep in mind that:

1. Each objective must relate to one or more pupil learning goals.
2. The goals describe the characteristics which the community expects the school to help develop in pupils.
3. Objectives further specify and describe those characteristics.
4. Objectives are tools to be used by the student and teacher. They are not masters to be served.

The question of Levels of Objectives was introduced on page 8. The district or school should determine in advance its plan for classifying objectives by level. There will be at least two, program and task levels. More may be included if further classification will serve a valid purpose.

Program objectives may be written well in advance of implementing the instructional program. Often they are developed by writing teams. Task objectives are usually prepared by individual teachers while developing units or lesson plans or in related preparation. Both kinds of objectives should be measurable or verifiable.

When starting to produce objectives it is usually desirable to start with those related to a broader instructional sequence such as a program, grade level, or course. This helps to avoid trivia; it provides a framework into which task objectives can later be placed; and perhaps more important to the teacher, the quantity of objectives needed is within reason, usually 5-15 in number for a given subject, course, or program. The more numerous task objectives can then be developed as the need arises, spread over a longer period of time.

Enough of that! Let's write again. On the next page is another form, which has been successfully used to "produce" objectives for a school or district. It is self-explanatory except for two items:

1. "Identify your Goal Statement Reference" refers to a document like the "Jefferson Union High School District Goals," or the "Seven Cardinal Principles," etc.
2. "To which goal . . ." applies to one of the goals such as "self-worth" or "economic efficiency, " etc.

The bottom of the page has a place to indicate how you "tested or validated the objective." Have other teachers checked it? Have you actually used it in class? Has it been validated by students on the form shown later on the green sheet on page 24, or a similar form? Page 20 provides a sample of the completed form.

Now write another objective using your own words in narrative style. The order in which the various components appear in the objective is not important.

After writing this objective have it evaluated. Trade your objective with someone else in the group. Evaluate each other's objective on the form like that shown on page 21. When your objective has been examined by other teachers and when you have made the necessary revisions, you now have an objective which has been "validated by teachers."

FORM E

DISTRICT: _____

SCHOOL: _____

TEACHER: _____

This form is usable for production of objectives by teachers. It is recommended for program, subject, or unit objectives. Note reverse side.

1. Goal Statement Reference: _____

2. To which goal(s) does your objective relate? (abbreviate)

_____

3. Subject Area: (check one)

_____ Administration (etc.)
_____ Art
_____ Career Education
_____ Foreign Language
_____ Health and Safety
_____ Home Economics
_____ Language Arts
_____ Mathematics
_____ Music
_____ Physical Education
_____ Reading--Literature
_____ Science
_____ Social Science
_____ Other: _____

4. Title of "Unit" or Group: _____

5. Pupil Level: (check one)

_____ K - 3 (Primary)
_____ 4 - 8 (Upper Elementary)
_____ Specific Grade Level (if any)
_____ Other

OBJECTIVE: (Who does what, how well, under what conditions?)

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Comment: _____

_____

_____

_____

VALIDATION OF THE OBJECTIVE:

By students:	_____ YES	_____ NO
By other teachers:	_____ YES	_____ NO
Tested in actual use:	_____ YES	_____ NO

SAMPLE FORM E

DISTRICT: Moreno Union

SCHOOL: Abelarde

TEACHER: Jones

This form is usable for production of objectives by teachers. It is recommended for program, subject, or unit objectives. Note reverse side.

1. Goal Statement Reference: Moreno District Goals

2. To which goal(s) does your objective relate? (abbreviate)
Career Development

3. Subject Area: (check one)

____	Administration (etc.)	____	Mathematics
____	Art	____	Music
✓	Career Education	____	Physical Education
____	Foreign Language	____	Reading--Literature
____	Health and Safety	____	Science
____	Home Economics	____	Social Science
____	Language Arts	____	Other:

4. Title of "Unit" or Group: Vocations

5. Pupil Level: (check one)

____	K - 3 (Primary)	8	Specific Grade Level (if any)
____	4 - 8 (Upper Elementary)	____	Other:

OBJECTIVE: (Who does what, how well, under what conditions?)

By the end of the year each 8th grade student will have interviewed workers in at least 3 different occupations and will list in writing the personal and educational or training requirements of each. Each student will make an appointment with one teacher of his choice in the school to discuss these requirements in relation to his own individual qualifications.

Comment: Following the conference with the teacher, a notation will be entered on the student's permanent record form.

VALIDATION OF THE OBJECTIVE:

By students:	____ YES	____ NO
By other teachers:	✓ YES	____ NO
Tested in actual use:	✓ YES	____ NO

TEACHER EVALUATION OF AN OBJECTIVE

Name of Author of the Objective: _____

Name of Evaluator of the Objective: _____

Check one column for each component:

Component	Clear & Concise	"Fuzzy"	Not Included
1. Rationale (use if appropriate)			
2. Performer (Who)			
3. Action or Performance			
4. Time (use if appropriate)			
5. Criteria			
6. Conditions of Evaluation			
7. Narrative (use if appropriate)			

Comments or suggestions: _____

_____

_____

_____

_____

Borrowing Objectives From Others

Is it necessary for each teacher to write all of his own objectives?

Definitely not!!

There are two basic means of utilizing objectives written by others:

1. You may select from published sets of objectives. Some sources are listed on pages 7 to 9. There are other sources including the Instructional Objectives Exchange at UCLA, P. O. Box 24095, Los Angeles, CA 90024.
2. You may utilize writing teams from within the school or district, or from several cooperating districts to prepare objectives in various subjects.

However --

> Teachers need some skill in writing objectives themselves in order to select wisely from others.

Furthermore --

> The acceptance of the concept of accountability is vital to successful use of objectives. Learning to understand this concept may involve study and training usually accompanying programs designed to teach objective writing.

Also --

> Teachers tend to be individualistic. Most do not like to utilize without modification materials developed by others. To make necessary adaptations in objectives, some training and experience is needed.

and so --

You can borrow objectives from others; but wise selection and appropriate adaptation requires knowledge, skill and practice.

E. STUDENT VALIDATION OF OBJECTIVES

For an instructional or classroom objective to contribute to the maximum degree to pupil learning it must be perceived by the student as both relevant and attainable for him. There is evidence that students do better when objectives meet these criteria.

Teachers are sometimes prone to ask, "Do you mean that I should let students evaluate my objectives?"

The answer in most instances is an unqualified "Yes." However, because of the language barrier the problem of young children participating in this activity is difficult to solve. Furthermore, for some objectives in the affective domain[1/] (see page 25) it is unwise to inform students of the objective. However, teachers who involve students in planning for their own learning not only find that their students learn more, and learn it better, but they themselves experience greater satisfaction in their own work. With these benefits possible, why not try it? It might just possibly work for you.

The following sheet will enable you to have students evaluate objectives as to their relevance and attainability. It was developed and tested by North Bay PACE Center Associate Mr. Donald Kase. If you find that the process works on a few students, you can duplicate the sheet, or modify it, and use it with other objectives for the whole class.

The final test, of course, comes when you use the objective as an aid to your teaching. This validates it in actual use.

1/ In objectives related to emotions and attitudes, the validity of the measuring device is sometimes destroyed if the student is aware of why he is being "tested." (i.e., demonstrating a liking for reading) However, this does not mean that parents or other teachers may not be informed of the objective.

Student Number _____

Student's Name _____ Grade _____
LAST FIRST

Teacher's Name _____ School _____
LAST FIRST

Name of Course _____ Date _____

LEARNING OBJECTIVE: Circle Sex: M F

Place an "X" on a line somewhere between each pair of opposite statements below to show how you feel about the above learning objective:

1. I'd like to learn to do it. :___:___:___:___:___:___:___: I wouldn't like to learn to do it. Don't know _____

2. I don't need to learn to do it. :___:___:___:___:___:___:___: I need to learn to do it. Don't know _____

3. If I learn it, I'd use it. :___:___:___:___:___:___:___: If I learn it, I wouldn't use it. Don't know _____

4. I shouldn't learn to do it. :___:___:___:___:___:___:___: I should learn to do it. Don't know _____

5. I can learn to do it. :___:___:___:___:___:___:___: I can't learn to do it. Don't know _____

6. How much would you like to have a job someday that would let you use this skill and get paid for it?

Very much :___:___:___:___:___:___:___: Not at all. Don't know _____

F. DOMAINS OF LEARNING

Another factor in classification of objectives deals with what is now called the "domains of learning." If the term scares you or "turns you off," remember that when we used to talk about the "whole child" we were considering body, mind, and soul. Today's domains spell out in detail what is meant by developing the "mind" (cognitive domain), the "body" (psychomotor domain), and the "soul" (akin to the affective domain). Thus, in developing objectives for a given unit the teacher will probably have learnings in the cognitive domain--those which the pupil is expected to know. However, we may also want him to like the subject. That introduces the affective domain (somewhat similar to the soul). Perhaps he has to engage in physical activity. That is psychomotor learning.

The identification of the various domains of learning has grown out of the attempt to systematically categorize different types of learning into a taxonomy or classification. The most widely known taxonomy of educational learning is that developed by Benjamin Bloom and David Krathwohl[1/] in the late 50's and 60's when they published handbooks describing the cognitive (1956) and affective (1964) domains. The psychomotor domain was delineated by Elizabeth Jane Simpson[2/] in 1966.

TERMS UTILIZED TO DESCRIBE BEHAVIOR[3/]

COGNITIVE LEVELS	AFFECTIVE LEVELS	PSYCHOMOTOR LEVELS
Knowledge	Receive	Imitation
Comprehension	Respond	Manipulation
Application	Value	Precision
Analysis	Organization	Articulation
Synthesis	Characterization	Naturalization
Evaluation		

1/ Benjamin S. Bloom (ed), Taxonomy of Educational Objectives, Handbook I: Cognitive Domain; David McKay Co., Inc.; New York; 1956; and Handbook II: Affective Domain; 1964.

2/ Elizabeth Jane Simpson, Taxonomy of Educational Objectives: Psychomotor Domain, University of Illinois, Urbana, Illinois, 1966.

3/ EPIC Booklet No. 2, Developing and Writing Behavioral Objectives, Educational Innovators Press, Box 13052, Tucson, Arizona 85711, 1970.

While this classification of objectives into the three domains is widely accepted it is by no means the only one. Robert Thompson writing in 1971 identified seven domains, and there are others. The particular system of classification is unimportant--what is important is to understand the implications for planning of instruction.

IMPLICATIONS FOR TEACHER

When a child has an opportunity to learn under the guidance of a teacher, it is only sensible and economical to allow him to learn as much as his capabilities and the learning conditions will permit. For example, while a child is learning the skill of addition (cognitive) he could at the same time be learning to enjoy or like the use of mathematical skills (affective); or when a pupil is learning to use the typewriter (psychomotor and cognitive) he can also be learning good work habits (affective). There is often an overlap of the various domains in any single learning activity.

Teachers sometimes plan for multiple learnings out of a single set of experiences, but in many cases this is not done. Still more frequently we fail to determine the resulting degree of learning in more than one domain, or even if any learning has taken place at all in the second area. And lastly, we often overlook the value of providing learning experiences for the more complex types of learning--we provide for simple recall (cognitive knowledge) but fail to teach decision making (cognitive evaluation).

The various levels in the three domains provide a check list against which the teacher can ask, "Have I really provided for all possible learning experiences which the topic could afford, and which are appropriate for the pupil?" and "Have I identified a way of determining whether or not the pupil actually learned all of the facts, attitudes, and skills which I hoped he would learn?"

After reading the foregoing, and participating in the practice exercises, you are now ready to do more in depth work and continue production. We suggest that you obtain a copy of A Programmed Course for the Writing of Performance Objectives, Northern California Program Development Center, Chico State College, Chico, CA 95926. You can use this book independently. It will take approximately seven hours to complete.

G. OBJECTIVES FOR PERSONNEL EVALUATION--IN PERSPECTIVE

The Stull Act does not mention performance objectives--or even the word objectives. It does provide that districts shall develop "objective evaluation and assessment guidelines." It also says that certificated staff evaluation should, among other things be based on, "the establishment of standards of expected student progress in each area of study and of techniques for the assessment of that progress," and it further calls for the "assessment of certificated personnel competence as it relates to (student achievement of) the established standards."

Since properly written performance objectives contain criteria closely related to "standards of student progress," and since the techniques for measurement (assessment) are usually included in such objectives, and since all comprehensive curriculum guides already contain some type of objectives, the movement to convert old style objectives to performance type to meet requirements of the Stull Act is becoming almost universal. This conversion has been hastened by the reservoir of skill in writing performance objectives, and by the quantity of objectives already in hand as a result of the pioneering work done by districts in relation to Program Budgeting.

The Stull Act poses the problem of converting student achievement into one measure of competence of teachers, administrators, and related certificated support personnel.

The following material is designed to be of specific help to teachers and principals as they develop their own personnel evaluation plans. There is no one "right" way of doing it. However, it is possible to point out some of the differences between types of objectives used for various purposes and thus save time, work--and paper.

GROUND RULES

1. Each objective for teachers, students, and principals must be consistent with the schools' philosophy and/or beliefs about children.
2. Each objective must have an identifiable relationship to one or more of the pupil learning goals of the school, or its institutional goals.
3. One or more objectives should be developed by each certificated staff member in at least the four areas prescribed in the Stull Act, if applicable to the position.
4. Each objective must contain observable, measurable, or quantifiable criteria to indicate success in achieving it.
5. The total number of objectives adopted by any one individual for any given time should be small enough in number (usually under 10 and commonly 4 or 5) so that achievement data can be easily collected and reported.
6. This part of the planning and evaluation processes should support, rather than detract from other aspects of the educational program.

OBJECTIVES FOR PERSONNEL EVALUATION--IN PERSPECTIVE

STULL ACT CRITERIA	RELATED DISTRICT STUDENT LEARNING GOAL	TYPICAL STUDENT OBJECTIVE	TYPICAL TEACHER OBJECTIVE	TYPICAL PRINCIPAL OBJECTIVE	COMMENT
These are the areas for personnel evaluation prescribed in the Stull Act.	The goals cited here are typical of those found in many district statements of educational goals.	This type of objective is a part of curriculum planning. During a year a student may work with a great many such objectives in numerous subject areas.	Each of these objectives could be one of 5 or 6 on which the teacher would work during the year as part of her Stull Act evaluation. This first objective could be the teacher's objective in curriculum planning.	The principal's first objective could be to see that the teachers (and the school) obtain the data to set standards--and then to adopt those standards. The others listed here could comprise the principal's major thrusts for the year.	
Establishment of standards of expected student progress and of techniques of assessment of that progress.	To develop in each pupil the motivation to achieve to his optimum potential.	The student will designate one task which he has always wanted to perform, but which he thinks he cannot do within a given time period. With the support of the teacher and other resources he will strive to achieve it by a certain date. Success will be judged either by achieving the task successfully or by presenting a realistic (in the estimation of the teacher) analysis of the causes for lack of success. Those not succeeding will attempt a different challenge.	By October 15, each student in the class will have at least five objectives, each in a different subject area, which he expects to achieve by the end of each quarter. Each objective will be judged by the student and the teacher, to be challenging, yet attainable.	By October 15, each teacher will have developed learning objectives for each pupil (or the class). The principal and the teacher will concur that the criteria in the objectives are measurable, or observable, and that the results will contribute data for "setting standards of student progress" by the end of the year. Objectives will be in writing.	The Stull Act prescribes that standards of student achievement be set in all subjects. To do this requires the collection of data on which standards can be based. Consequently, this is a multi-year endeavor--more difficult in the affective areas than for cognitive and psychomotor skills. Furthermore, standards need not be static. They can change with changing conditions. However, they should be sufficiently stable to indicate student achievement in relation to an adopted local standard.

OBJECTIVES FOR PERSONNEL EVALUATION--IN PERSPECTIVE (cont'd)

STULL ACT CRITERIA	RELATED DISTRICT STUDENT LEARNING GOAL	TYPICAL STUDENT OBJECTIVE	TYPICAL TEACHER OBJECTIVE	TYPICAL PRINCIPAL OBJECTIVE	COMMENT
Assessment of certificated personnel competence as it relates to (student achievement of) accepted standards.	To develop competence in the basic skills of communication.	By the end of the unit on punctuation, the student will write a narrative with a minimum of 150 words containing no more than two errors of punctuation. Deviations from common practice will be accepted if the student can explain how the deviation was deliberately done to enhance clarity of meaning.	Each student will achieve an average of at least 75% of their individual (or class) learning objectives during the year.	The principal will see that 90% of all teacher objectives agreed upon in planning conferences during the year are achieved.	The teacher's job is to see that each student achieves reasonable levels of competence or meets the standards. The principal is expected to provide leadership in arriving at acceptable standards. As a part of his leadership and management functions he should make every effort to see that teachers are successful in setting and reaching their own objectives.
Performance of duties adjunct to regular assignments.	RELATED DISTRICT INSTITUTIONAL GOAL: To offer students a variety of experiences outside of regular classes so as to stimulate a wide range of pupil interests.	Not applicable	During the year the Drama Club (which I sponsor) will put on at least two major productions. Spectator attendance, number of club members, and the club treasury will increase at least 10% over the previous year.	By September 1, the list of special staff assignments will be published. After examination the Executive Committee of the Faculty Club will concur that it represents the best possible match of legal responsibilities, teacher talents, co-educational experiences for students and teacher load equalization. This same committee will evaluate results at the end of year according to these same criteria.	The teacher is responsible for successfully carrying out the adjunct duties assigned by the principal. Assignments may be developed cooperatively, but the principal is still responsible--that responsibility cannot legally be delegated.

OBJECTIVES FOR PERSONNEL EVALUATION--IN PERSPECTIVE (cont'd)

STULL ACT CRITERIA	RELATED DISTRICT INSTITUTIONAL GOAL	TYPICAL STUDENT OBJECTIVE	TYPICAL TEACHER OBJECTIVE	TYPICAL PRINCIPAL OBJECTIVE	COMMENT
Preserving a suitable learning environment.	To develop and maintain school plants which have maximum utility and a high level of aesthetic appeal.	Not applicable.	Once a week a designated fellow teacher will enter the room unannounced and rate the room environment on a check list for light, heat, ventilation, presence of unnecessary litter, and quality of interest centers. Average rating for the year will be "4" on a 5-point scale. The designated teacher will not be informed of the expected "4" rating.	Vandalism will be reduced by 50% from the previous year when judged either by number of incidents or dollar value.	The principal is responsible for the overall learning environment of the school. However, he may wish to emphasize one particular aspect of it during a given year. The teacher has a similar responsibility for his classroom. For the purpose of developing objectives "environment" and "control" have been arbitrarily divided here. The Stull Act puts them together.
Maintaining classroom control.	Interpersonal relations on each school campus will be maintained in a manner which promotes efficient and harmonious operation of the school program.	Not applicable	On the basis of a one hour observation once a week by a parent, the incidents where one pupil interfers with the learning of another pupil in the class will be reduced to not more than one incident for each hour of observation.	The number of pupils referred to the principal for disciplinary reasons will be reduced by 50% between the first and last month of the school year. Each teacher will anonymously stipulate in writing that the "discipline" at the school is at least as good at the end of the year as at the beginning.	These objectives make the arbitrary assumption that "control" refers to the interpersonal relationships or socio-psychological aspects of the school environment.

OBJECTIVES FOR PERSONNEL EVALUATION--IN PERSPECTIVE (cont'd)

STULL ACT CRITERIA	RELATED DISTRICT INSTITUTIONAL GOAL	TYPICAL STUDENT OBJECTIVE	TYPICAL TEACHER OBJECTIVE	TYPICAL PRINCIPAL OBJECTIVE	COMMENT
The area of professional growth is not included in the Stull Act. However, many consider it to be of such importance that it is included here.	To develop in each staff member the desire and ability to cope with growth and change.	Not applicable.	During the year (I) the teacher will learn and apply at least one new instructional technique which has not been attempted previously. She will set up an appropriate evaluation strategy for the technique and report results to the principal prior to the end of the year.	Through whatever means at her disposal (I) the principal will learn and apply at least one new management technique during the year. She will establish appropriate evaluation strategy using either members of the staff or outside "experts" to determine the effectiveness of the technique.	The acceptance of an objective related to professional growth provides each staff member with the specific opportunity to grow on the job--to keep up with the times--to cope with change which is as important for staff as it is for students.
Each of the areas in the Stull Act plus one have now been covered.	Each area of the Stull Act has been related to atypical student learning or institutional goal.	This column shows examples where applicable of how the Stull Act areas, district goals, and student objectives interface.	If each teacher developed six objectives similar to those in this column, would he not have identified key areas for evaluation of his own success during the year?	If each principal adopted six objectives such as those in this column and collected data on his achievement, would not the principal, in terms of leadership and support to staff, have data on which to base a reasonable evaluation?	All of the objectives in the world are worthless unless they are implemented, and unless the degree of success is determined to the best of one's ability.

H. CONCLUSION[1/]

You should now have a good understanding of a complete performance objective and should be able to produce them--but there is a catch.

You will lose this skill, like any other, unless you use it. Each district, each school, each program should have its goal(s). Each goal should be accompanied by the necessary performance objectives. When you have done this, you will:

1. Have transformed platitudinous statements of philosophy and goals into concrete student achievement as measured by your objectives.
2. Be able to better evaluate the work of your pupils.
3. Know where you, as a teacher, are exceeding your planned achievements--or failing to meet them.
4. Have a good picture of how well you and your school are doing in line with expectations.
5. Be able to communicate better to others what your pupils have actually learned.

Frightening, isn't it--but it is also an exciting challenge!

1/ Two other related articles are available through the Planning and Development Division of the San Mateo County Office of Education which supplement the foregoing material:

1. Using Performance Objectives to Improve Instruction
2. The Principal and the Stull Act